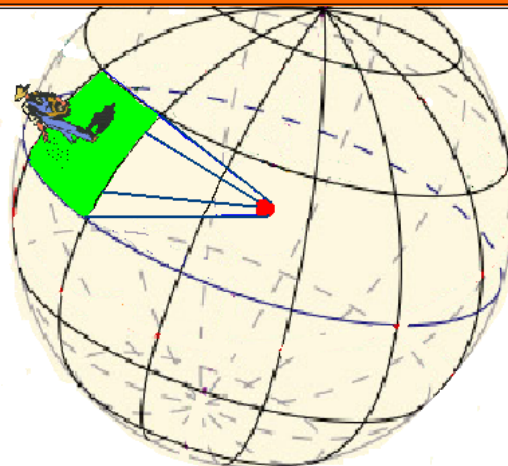


# Chapter 1 – The Land

It has often been said that land is the basis of all wealth. Those who work in the petroleum land field know the truth in that statement. Not all surface tracts of land have great value. There are remote and desolate areas of the country where water is scarce, crops won't grow and deer and antelope don't even want to play; however, that does not mean that the land does not possess great value. Subsurface minerals often create a far greater value to the land than does the surface.

Generally speaking, when a pioneer moved west and acquired a certain tract of land, the acquisition involved both surface and subsurface acres *to the center of the earth*. Picture the pioneer standing in the middle of his newly acquired 160-acre tract of land. The acres stretching out before him were a vision of his future wealth. It meant work and a lot of it! He had to clear the land, cultivate the land, plant the land and then stick with it. Picture the pioneer once again. His eyes are fixed on the horizon. Not once does he focus his attention on the subsurface land. Yet, in many cases, the wealth from the land came more from the subsurface mineral acres than from the surface top soil acreage.

**Generally, the first owners of surface acres also owned the mineral estate to the center of the earth. These minerals could represent more value than the surface acres.**

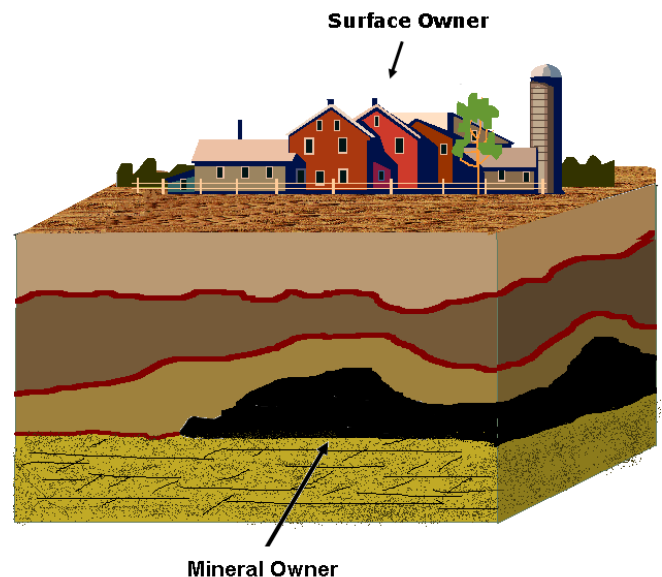


Over the years, ownership of that same tract of land has changed hands many times. The pioneer could have lived on the tract of land until he died, whereby his heirs inherited both surface land and subsurface minerals. He could have lost the land through foreclosure or unpaid taxes. He could have sold the surface land but kept the mineral rights, or he could have sold the mineral rights but kept the surface. Since ownership of the land and minerals becomes such an important focus of those working in petroleum land, a clear understanding of each is imperative.

## Bundle of Sticks

Ownership of land comes with a handful of rights. It is like owning a bundle of sticks – not just one stick. In the illustration, this owner possesses the rights to the surface estate which include the rights of possession, occupation, and use, as well as the right to exclude others from the property, the right to sell, lease, mortgage, give away or abandon the property.

It also can be said that property ownership gives the owner the right to receive the fruits produced by the asset of such property. Such fruits would be rent from the land, crops from fields, or fruit from trees.

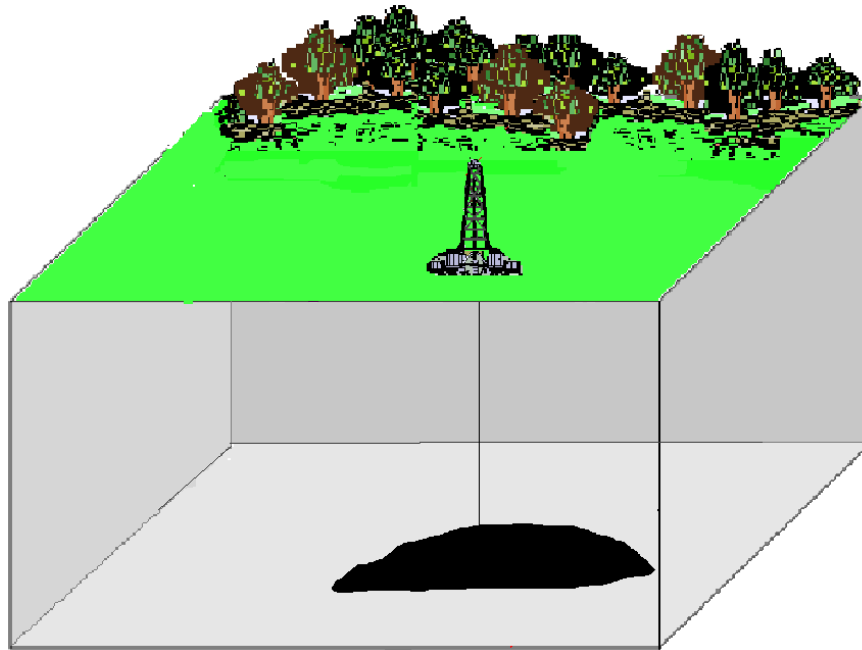


The mineral estate, under any given surface tract of land, may be owned by one or multiple owners which are different from the surface owner. When this happens, it is said that the mineral ownership has been *severed* from the surface ownership.

In the United States today, the mineral owner or owners are often different from the surface owner. This *severing* of the ownership away from the surface owner may have occurred at any time during the ownership history of the tract of land. Generally, minerals are severed through a mineral title conveyance or through a mineral reservation. Once the severing takes place the mineral owner is assured many of the same rights as the surface land owner including leasing, selling, abandoning, or developing the mineral rights.

If an oil and gas company leased this tract of land, what portion of this picture would the oil and gas lease cover?

1. The surface
2. The minerals
3. Both the surface and minerals

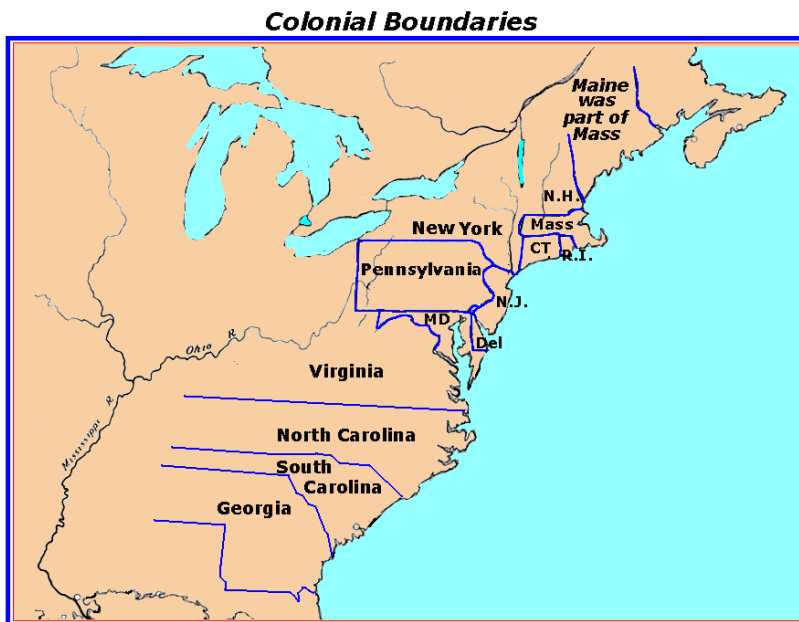


Answer: At the point in time an oil and gas company takes a lease, they are not really concerned with who owns the surface land. Their primary interest is in who owns the mineral estate. It is the mineral estate that is being leased. Therefore, an oil and gas mineral lease covers mineral interest and gives the leasing company the right to access the minerals by way of the surface.

## Land Ownership History in the United States

Prior to the Revolutionary War, during what is known as the Colonial Period, Spain claimed much of the lands to the west of the Mississippi River and those lands southeast and southwest of the colonies. France claimed the lands north and south along the Mississippi River up into the Ohio River Valley.

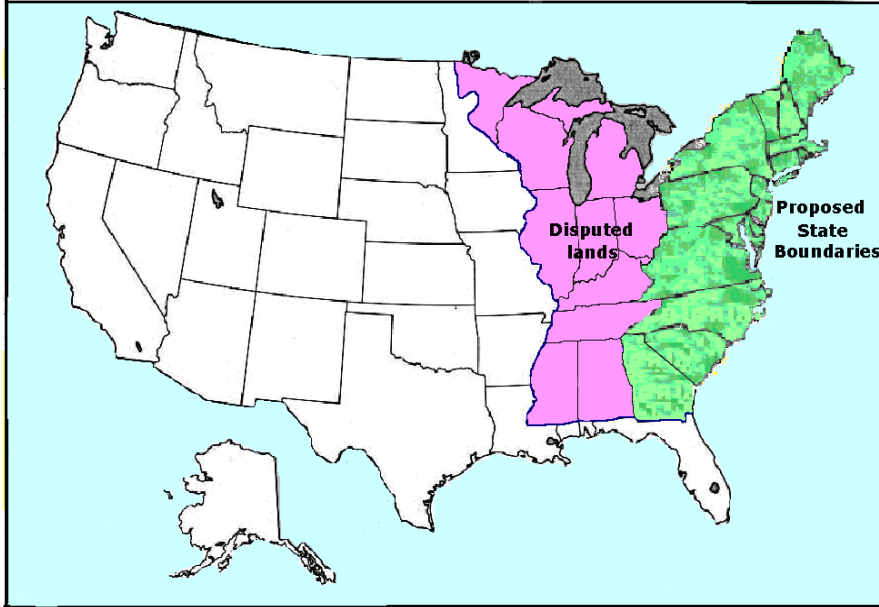
The thirteen colonies were originally territories of the British Empire. They eventually received land grants to this land from England. In some cases, the grants extended from the Atlantic Ocean to the Pacific Ocean. Six of the colonies had defined western boundaries (New Hampshire, Rhode Island, New Jersey, Delaware, Pennsylvania and Maryland). The western boundary for the other seven colonies (Massachusetts, Connecticut, New York, Virginia, North Carolina, South Carolina and Georgia) was considered the Pacific Ocean. At that time, no one had traveled inland to the Pacific Ocean nor did anyone know how far the land extended.



As can be seen, with this vague concept of owning the lands to the Pacific Ocean and the claim of some of the same lands by the French and Spanish, there were disputed lands from the very beginning.

At the end of the Revolutionary War, the land mass of the United States, generally, encompassed those lands east of the Mississippi. Florida was still claimed by Spain and vast portions of those lands west of the Mississippi were claimed by France, Mexico and the British Empire.

The government proposed that each of the original colonies fix their western state lines far short of the Mississippi River. The vast areas in-between these fixed state lines and the Mississippi was to be owned by the United States government. This proposal was met with furious opposition from states like Virginia and Georgia. They knew that future sales of these lands were like having a gold mine in their back yard and that such a proposal would critically limit their ability to make money from land sales.



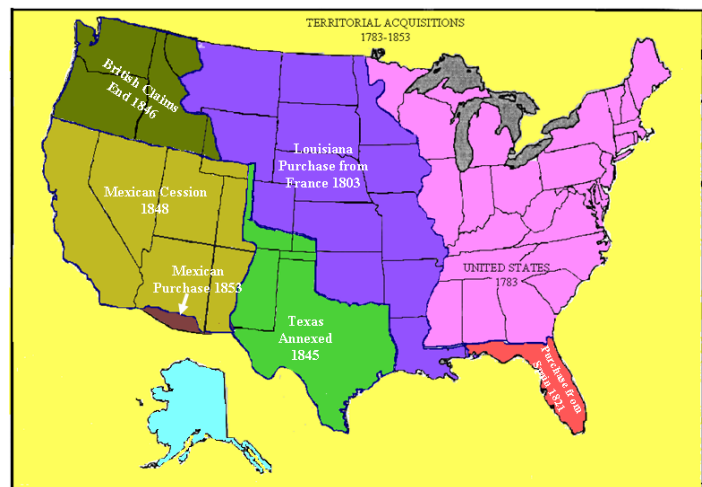
The United States government; however, was also motivated by the potential revenue that would be generated from these land sales. They desperately wanted the revenue, specifically for the purpose of paying off debt incurred from the war. In 1784, a

compromise was reached whereby the thirteen states ceded their claims to the western lands and the states of Vermont, Maine, and Kentucky were formed out of lands that had been in dispute.

## Acquisition of Lands by the United States Government

In 1783, the shape and size of the United States was not as it is today. In order to understand some very important title issues that surround the ownership of land and/or minerals, it is important to understand how the United States acquired title to the rest of the present day United States. The acquisitions were made in several ways: through treaty, purchase, and annexation.

It was not until 1803 that the United States purchased from France, for three (3) cents an acre, some 523 million acres of land, which now comprise present-day North and South Dakota, Nebraska, Kansas, Iowa, Missouri, Arkansas, and Louisiana; most of Wyoming, Montana, Minnesota, and Oklahoma; and the northeastern portion of Colorado. This acquisition is known as *The Louisiana Purchase*. In 1821,



what is now known as Florida was purchased from Spain.

*The Oregon Compromise of 1846* resolved the British-American dispute over the northwest boundary and in that year the British claim of ownership was extinguished. Washington, Oregon, Idaho, and lands in northwestern Montana and west central Wyoming were then added to the rapidly growing nation.

Under *The Treaty of Guadalupe Hidalgo* (1848), Mexico agreed to sell to the United States for \$15 million all of what is now California, Nevada, Utah, Arizona, north of the Gila River, New Mexico west of the Rio Grande River, and parts of Southwestern Colorado, totaling 334,479,360 acres.

In 1845, Texas was annexed into the Union. Five years later, Texas sold to the United States 78,842,880 acres of its western lands for \$10 million. The lands that were sold are now portions of present-day New Mexico, Oklahoma, Wyoming, Colorado and Kansas.

In 1853, James Gadsden negotiated a purchase from Mexico, a tract south of the Gila River in Arizona, for \$10 million.

In 1867, Alaska was purchased from Russia by the United States, paying \$7 million for these 18,961,920 acres.

At the end of this era of expansion, the United States owned approximately 1.9 billion acres of land in the lower 48 states and an additional 365 million acres in Alaska. Of the 1.9 billion acres, 1.4 billion acres of land were considered vacant and unoccupied. Since the vast portion of these western frontier lands were unsettled, the government devised a plan to occupy this area and make it productive. That plan resulted in what is today known as "Land Grants."

## The Granting of Lands

After the expansion of the United States, the federal government held title to over 80 percent of the 1.9 billion acres comprising the lower 48 states. Today, they own less than 30 percent of the same land area. In order to settle the western frontier, the vast majority of that land was granted to either states, settlers, or to railroads.



As a source of revenue to help support the common schools, states or territories were granted lands for: public buildings, penitentiaries, universities and school Lands.

## Lands Granted to Settlers

At the outset of the granting phase of our history, nearly 1.4 billion acres of the western frontier were primarily unoccupied. During this time, the government continued to promote the westward movement and began to grant lands through a conveyance called a *land patent*. Patents were given to those individuals who met the criteria for the following categories:

1. Residence requirements
2. Land improvement requirements
3. Requirements for actual settlement and cultivation for 5 years

The significant patenting of western lands began with *The Homestead Act of 1862*. It allowed ownership in 160-acre tracts of land. The land was free, except for filing fees, hence the origination of the term *Fee Lands*. Homesteads were available on any land where Indian title was deemed non-existent. Between 1862 and 1900, over 80 million acres of land were granted to settlers under this act.

One type of improvement requirement came with *The Timber Culture Act of 1873*. The purpose of this act was to promote the growth of forests on the western frontier and allowed settlers to claim an additional 160 acres if they were able to plant and then cultivate 25% of the land with trees. Imagine planting 40 acres of trees on a tract of land that had grown only prairie grass for the last ten thousand years! Five years later, *The Desert Land Act* was passed. This act provided for 640 acres of land if the settler could irrigate the land within two years. Imagine irrigating 640 acres of desert land! The land improvement requirements were often impossible.

## The Checker Boarding of the Western United States

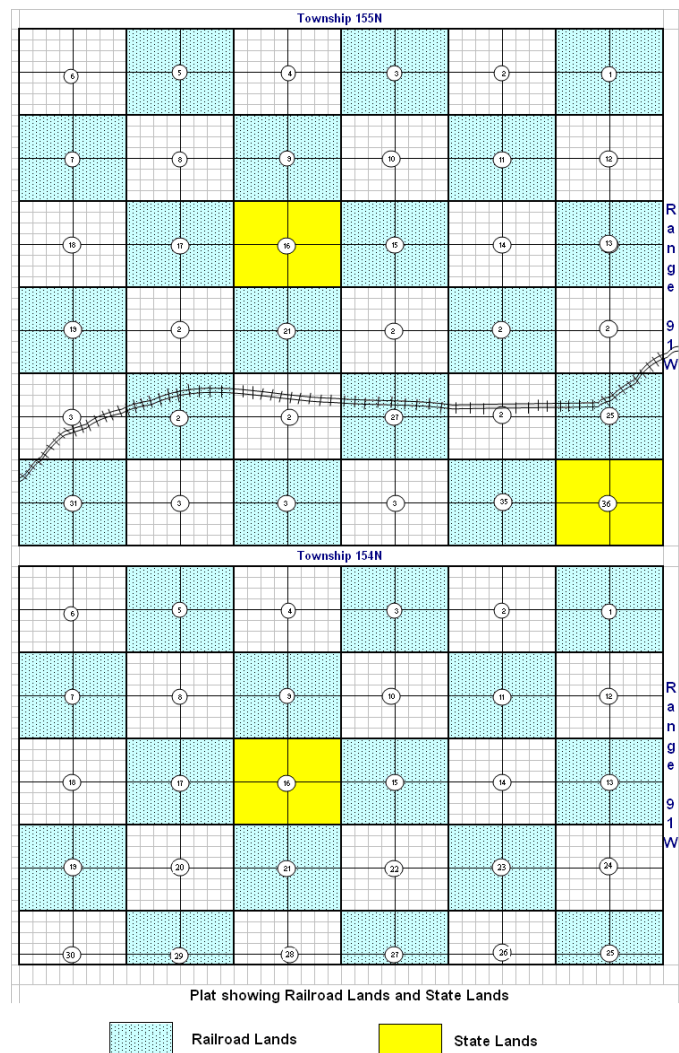
Congress recognized that public aid for the construction of railroads across the country was necessary to make possible the settlement of its western lands. Between 1850 and 1870, they began granting large portions of the frontier lands to railroad companies in order to subsidize their construction. These land grants became known as the Federal Railroad Land Grants or also the *"checker boarding of the western United States"* and comprised tens of millions of acres of land.

The first of several of these grants was enacted in 1862 to promote a transcontinental railroad. The Union Pacific and Central Pacific railroads were granted 400-foot right-of-ways and ten odd-numbered sections of land for every mile of track that was laid. In 1864, the land grants to these two railroads were increased to include 20 odd-numbered sections (ten sections on each side of the right-of-way) for every mile built.

The Burlington Railroad was given a 200-foot right-of-way and 20 sections per mile of public lands from the Missouri River to Nebraska.

From Atchison, Kansas, to the western border of the state, the Santa Fe Railroad was given lands of alternate sections for a depth of 10 miles on both sides of the tract. In all, twenty percent of the acreage in Kansas passed to railroads.

In 1864, the Northern Pacific Railroad Company was given a 400-foot right-of-way and 20 sections of land on each side of the tract for each mile constructed in states and 40 sections for each mile in territories. This grant comprised 45,000,000 acres, 80 miles wide in the states and 160 miles wide in the territories. The land grant consisted of 23% of North Dakota and 15% of Montana.



The Texas Pacific Railroad received a similar grant stretching from the eastern Texas border to San Diego, California.

The important thing to remember is that when these lands were granted to the railroads, seldom were oil and gas mineral reservations invoked by the federal government. Therefore, generally, these minerals passed to the railroad companies.

## The Native American Indian Lands

In comparison to the vast land grants given to the railroads, the individual states, and the settlers, how did the Native American Indians fare?

After the period of acquisition of the western lands from France and Britain, the United States began to settle treaties with the Native Americans. Although they recognized that these people had a right to the land they occupied, the government transferred these rights to themselves in order to hold portions of this land in trust for the native people.

At times, these lands were set aside in order to establish reservations. These reservation lands also were held in trust and managed by the United States government.

Courts concluded that the United States stood in the shoes of the respective discovering European nations who had asserted ultimate dominion over the lands they discovered. Furthermore, since "land ownership" was a foreign concept to most Native Americans, the courts concluded that the land should be held in trust on their behalf.

Courts also concluded that since the Indians retained only a right-of-occupancy, they did not possess the right to transfer title to the property to others.

Based upon this underlying rationale, the power of the United States to control the disposition of Indian lands has always been recognized by the courts of the United States.

Native American Indian lands were placed into two categories:

1. **Tribal Indian land** is land owned by the United States as trustee for the use and benefit of a tribe, group, or band of Indians.
2. **Allotted Indian land** is land owned by the United States as trustee for the use and benefit of individual Indians. The Indian interest in tribal or allotted land is similar to the interest of a beneficiary under a trust.

Today there are approximately 275 Native American land areas administered by the United States as Indian reservations. The Navajo Reservation in portions of Arizona, New Mexico and Utah encompasses the largest area with 16 million acres of land. The smallest reservation holds less than 100 acres. In total, over 56 million acres of land are held in trust by the United States for either tribes or individuals. It is important to note that fee lands can also be located within the boundary of a reservation.

### **EXERCISE 1:**

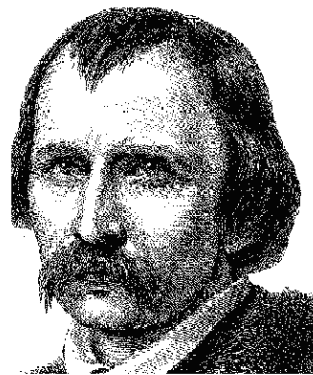
Assume you are one of four pioneers living in the late 1880's. You have lived your whole life back "east" but have been encouraged to join the vast number of homesteaders moving west. Recent letters from cousins have told you about a new community in North Dakota named Alpha Gulch. Land is cheap! Some land is free! Other tracts of land come with established businesses or jobs. Other tracts of land have great water access. Read the following bios of the four pioneers traveling to Alpha Gulch. These bios also contain the tract number for the land they wish to claim. After reviewing the bios and examining the tracts of lands available to each, choose which one of the pioneers and tracts of land you would have chosen.

*NOTE: Choose carefully, because, eventually, millions of dollars of oil and gas minerals could be discovered somewhere in or near Alpha Gulch.*



**Toby Jenkins  
Tract 1  
August, 1889**

After traveling to Alpha Gulch by covered wagon in 1889, Mr. Jenkins has an opportunity to take over ownership of the Mercantile if he purchases 160-acres of railroad land. Much of the land has been cleared, borders the Alpha Gulch River and is ready for cultivation. If he decides to homestead this track of land, the purchase price is \$.50 an acre.



**Samuel Osborn  
Tract 2  
October, 1889**

After traveling to Alpha Gulch by covered wagon in the late fall of 1889, Mr. Osborn can claim 160-acres of fee land one mile from town. The tract of land is uncleared, borders the Alpha Gulch River and is free to any qualified homesteader if they occupy and improve the land for five years.



**Sarah Murphy  
Tract 3  
March, 1894**

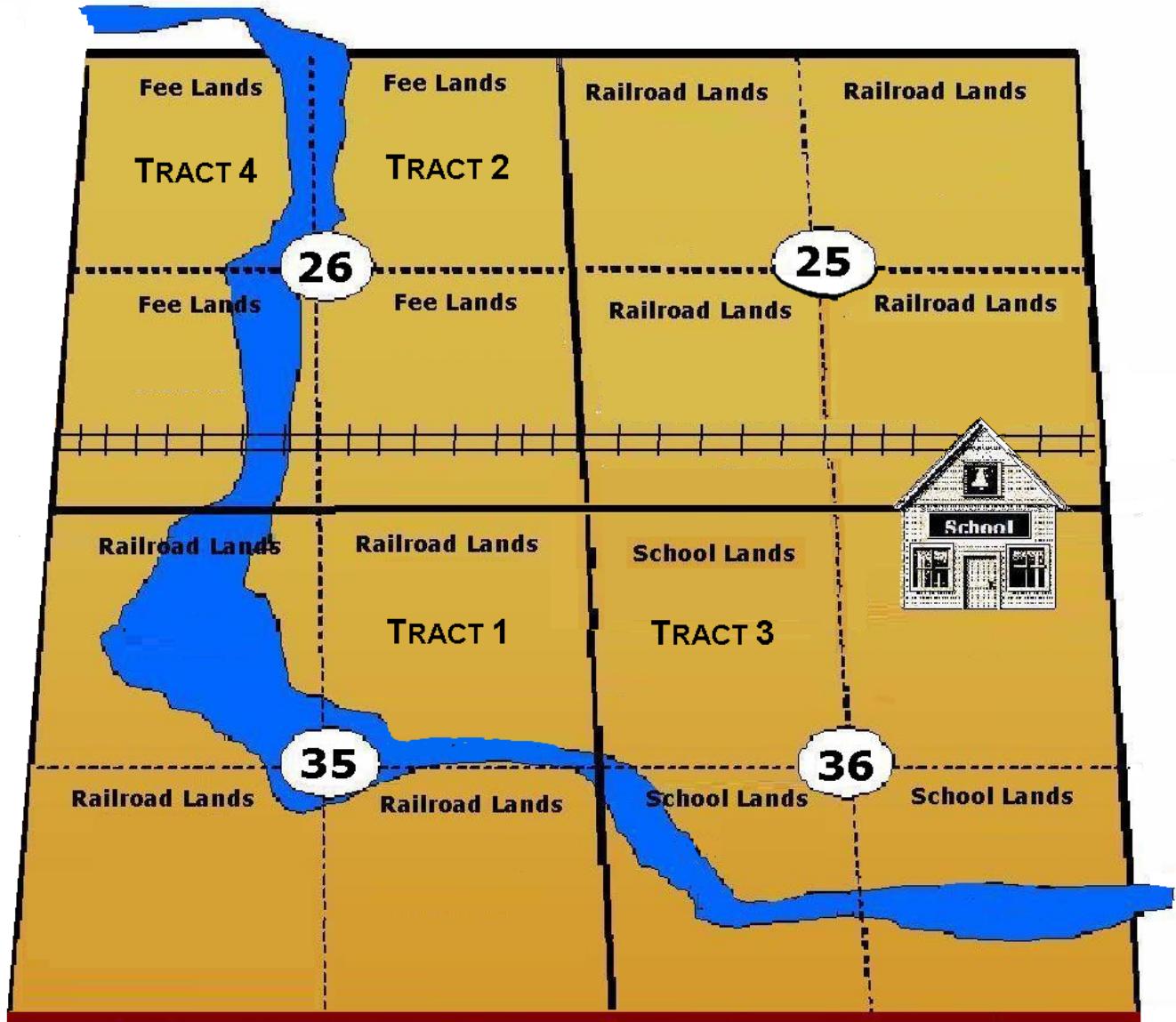
After traveling to Alpha Gulch by stage coach in 1894, Miss Murphy is being offered a job as the school mistress. She will be paid a salary of \$15 per month and will receive a deed to 160-acres of school lands if she stays with the position for five years. The southwest corner of the land borders the Alpha Gulch River.



**Debra Perkins  
Tract 4  
Spring, 1917**

Debra Perkins arrived in Alpha Gulch by motor car in the spring of 1917. Miss Perkins can claim 160-acres of free fee lands northwest of town. The land was previously cultivated and cleared by the original homesteader. This party died prior to receiving a patent to the land from the United States. In 1917, the town is thriving with many amenities.

## Alpha Gulch Project



### Township 14 North – Range 12 West

Decision: I have chosen tract # \_\_\_\_\_ as the parcel of land I would have wanted to homestead!

My Pioneer Name is \_\_\_\_\_.